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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,429	11/28/2003	Ming-Hua Li	LIE 178	7367
7590	09/22/2005		EXAMINER	
RABIN & BERDO, P.C. Suite 500 1101 14th Street, N.W. Washington, DC 20005				SHAKERI, HADI
		ART UNIT	PAPER NUMBER	3723

DATE MAILED: 09/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/722,429

Filing Date: November 28, 2003

Appellant(s): LI ET AL.

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Nick Bromer  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed July 05, 2005 appealing from the Office action mailed December 03, 2004.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

Art Unit: 3723

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

No evidence is relied upon by the examiner in the rejection of the claims under appeal.

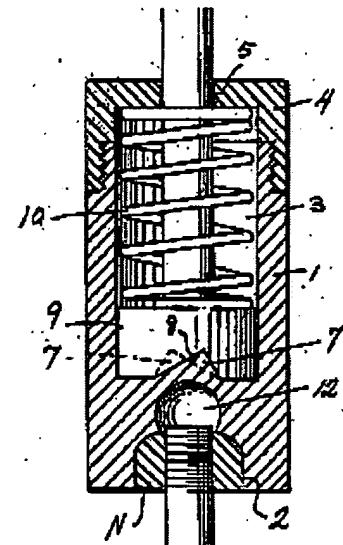
**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 9-11 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Le Chot (1,328,087) in view of Sedgley (1,521,331).

Art Unit: 3723

Le Chot meets all of the limitations of claim 9, i.e., a constant force socket comprising a coupling hole (2) having an open end and a closed end; an inner hole (3) having an open end and a closed end; wherein the closed end of the coupling hole abuts the closed end of the inner hole, a threaded region located proximate said open end of the inner hole, a first set of teeth (7) (two disclosed, solid and dotted lines) disposed in an interior of said inner hole proximate said closed end of said inner hole, a ratchet wheel having a first end (9) and a second end (6) and having a region of relatively greater diameter terminating in said first end and a region of relatively smaller diameter terminating in said second end; wherein the ratchet wheel is mounted in the inner hole; a second set of teeth (i.e., two sections defined by the gaps 8) disposed around the first end of the ratchet wheel; a spring mounted around said region of said ratchet wheel of relatively smaller diameter and abutting at a first end thereof said region of said ratchet wheel of relatively greater diameter, and a pressure adjusting element (4) having a threaded region adapted to threadably engage said inner hole; wherein a first side of said pressure adjusting element contacts a second end of said spring; and wherein rotation of said pressure adjusting element within said inner hole adjusts an amount of pressed force on said spring and thus on said ratchet wheel, except for the threaded region to be an interior region located in said inner hole; and a torsion tool hole at said second end of said ratchet wheel.



Regarding the threaded region, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the cap or cover (4) and the inner hole by exchanging the internal and the external threads, as the two are art recognized functional equivalents and that having an externally threaded cover cooperating with an internally threaded body, is known in the art, as further evident by cited references, e.g., Schnepel and Lee (Fig. 7),

Art Unit: 3723

and since applicant has not disclosed that this specific arrangement solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with the threads as disclosed by the reference.

Regarding the torsion tool hole at said second end of said ratchet wheel, it is noted that the tool as disclosed by Le Chot is configured for rotation through the elongated shank (6), but modifying the tool for operation by a wrench in view of Sedgley (e.g., Fig. 5), in which the second end of the ratchet body is adapted for engagement with an Allen wrench, would have been obvious to one of ordinary skill in the art at the time the invention was made, which would meet the limitations as recited.



Regarding claim 11, wherein the teeth of the body and teeth ratchet wheel each have a first sidewall and a second sidewall disposed at two sides and sloping at different angles, Le Chot, lines 74-76.

Regarding claim 10, Chot as modified by Sedgley, appears to meet the limitation, i.e., a vertical surface relative to the other sloping surface, however, as indicated by Le Chot any desired divergence angle may be used and using divergence angle, e.g., 45 degrees relative to the central longitudinal axis, modification within the knowledge of one of ordinary skill in the art, depending on the workpiece and/or operational parameters, would meet the limitation as recited, i.e., a vertical surface relative to the other surface forming the teeth or the gaps.

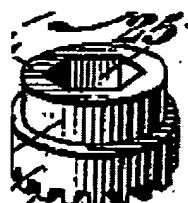
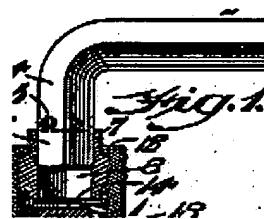
#### **(10) Response to Argument**

Appellant states that the general arrangement of Le Chot is similar to the Appellants' but argue that the cap (4) of Le Chot does not meet the claimed pressure adjusting element. Appellant relies on the passage from La Chot, wherein it is disclosed that, "The strength or tension of the expandible member 10 determines the tightness of the work, and for which

Art Unit: 3723

reason said member 10 is readily removed so that it can be replaced with a similar member of either greater or less strength or tension.", lines 103-108. Appellant admits, on the bottom of page 7, that "Le Chot discloses a mechanism that arguably *could* be used to adjust the compression of the spring 10, but the reference does not recognize this possibility and teaches that compression is varied by changing one spring 10 for another." Appellant further argues that it would not be obvious to one of ordinary skill in the art to use the cap of Le Chot to adjust the spring compression, even though the Examiner recognized this feature. This argument may apply to a method claim, although the Examiner disagrees with the Appellant position that one of ordinary skill in the art does only what is suggested, rather the Examiner believes person of ordinary skill, does also what is within the knowledge of one of ordinary skill in the art. However, this argument notwithstanding, the fact that Appellant agrees that the tool of Le Chot could arguably be used to adjust the compression of spring, indicates that rejection of claim 9 is proper, since in the article claim, the intended use and/or the functional language fails to result in a structural difference, and the tool as disclosed by Le Chot is capable of performing the function.

Appellant further argues that a *prima facie* case of obviousness is not presented in combining Le Chot with Sedgley, since the motivation is not suggested and that the teeth in La Chot are different from the teeth of Sedgley and that their tools are used for different reasons. The teaching from Sedgley is a ratchet wheel having a torsion tool hole (8 or 25), so that the tool may be driven by other types of drivers, e.g., Allen wrench, in other words a removable handle or drive member. Modifying the device for a removable driver or modifying the tool for an Allen type wrench is well within the knowledge of one of ordinary skill in the art, and is suggested by Sedgley, e.g., in Figs. 1 and 5.



Art Unit: 3723

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,



Hadi Shakeri  
Primary Examiner  
Art Unit 3723

Conferees:



Allan N. Shoap

Joseph J. Hail, III

